

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-3. (Cancelled)

4. (Currently amended) The oil pump drive assembly of claim 3 13 wherein the driven gear has a smaller diameter than the drive gear for providing a different rotation speed for the balance shaft.

5. (Original) The oil pump drive assembly of claim 4 wherein the balance shaft rotates at twice the speed of the drive shaft.

6. (Currently amended) The oil pump drive assembly of claim 4 13 including a housing having a sprocket side and a pump side.

7. (Original) The oil pump drive assembly of claim 6 wherein the sprocket side includes a first bore for supporting a gear end of the balance shaft.

8. (Original) The oil pump drive assembly of claim 6 wherein the pump side includes a second bore for supporting a distal end of the balance shaft.

9. (Original) The oil pump drive assembly of claim 6 including an oil pump housing attached to the pump side of the housing.

10. (Currently amended) The oil pump drive assembly of claim 9 wherein the ~~oil pump housing sprocket side~~ includes a third bore for supporting the sprocket end of the drive shaft.

11. (Original) The oil pump drive assembly of claim 9 wherein the oil pump housing includes a fourth bore for supporting the pump end of the drive shaft.

12. (Currently amended) The oil pump drive assembly of claim + 13 wherein the oil pump operates at the same rotational speed as the engine for increasing the oil pump efficiency and durability and to reduce noise of the oil pump.

13. (Currently amended) An oil pump drive assembly for an automobile engine comprising:

an oil pump;

a drive shaft having a distal input end and an opposite pump end secured to the oil pump for actuating the oil pump in response to rotation of the drive shaft;

a sprocket secured to the distal input end of the drive shaft; and

a gear assembly for transferring a force from the engine comprising a drive gear secured to the drive shaft between the pump and distal ends and a driven gear engaged with the drive gear for rotation of the driven gear in response to rotation of the drive shaft; and

a balance shaft extending axially from the driven gear for rotation with the driven gear in response to rotation of the drive shaft for dampening vibrations associated with the operation of the automobile engine, the balance shaft comprising at least two axially spaced offset masses;

the gear assembly positioned at the distal input end of the drive shaft and the oil pump positioned at ~~an~~ the opposite pump end of the drive shaft for providing packaging space for the oil pump drive assembly.

14. (Cancelled)

15. (New) An oil pump drive assembly for an automobile engine comprising:
a housing having a sprocket side and a pump side, the sprocket side including a first bore and a third bore and the pump side including a second bore and a fourth bore;
an oil pump;
a drive shaft disposed in the housing and extending axially between a distal input end supported in the third bore on the sprocket side of the housing and an opposite pump end supported in the fourth bore on the pump side of the housing, the opposite pump end secured to the oil pump for actuating the oil pump in response to rotation of the drive shaft;
a sprocket secured to the distal input end of the drive shaft;
a gear assembly for transferring a force from the engine comprising a drive gear secured to the drive shaft between the pump and the distal input end and a driven gear engaged with the drive gear for rotation of the driven gear in response to rotation of the drive shaft; and
a balance shaft disposed in the housing and extending axially between a gear end supported in the first bore on the sprocket side of the housing and an opposite distal end supported in the second bore on the pump side of the housing, the gear end secured to the driven gear for rotation with the driven gear in response to rotation of the drive shaft for dampening vibrations associated with the operation of the automobile engine;

the gear assembly positioned at the distal input end of the drive shaft and the oil pump positioned at the opposite pump end of the drive shaft for providing packaging space for the oil pump drive assembly.

16. (New) The oil pump drive assembly of claim 15 wherein the driven gear has a smaller diameter than the drive gear for providing a different rotation speed for the balance shaft.

17. (New) The oil pump drive assembly of claim 16 wherein the balance shaft rotates at twice the speed of the drive shaft.

18. (New) The oil pump drive assembly of claim 15 wherein the oil pump operates at the same rotational speed as the engine for increasing the oil pump efficiency and durability and to reduce noise of the oil pump.